What is claimed is:

1. A method for generating packet-based transmission control parameters, comprising:

(a) receiving class information of an audio-video (AV) application and characteristic information of an AV packet, from the AV application;

(b) receiving status information of a wireless channel and buffer storage time information of the AV packet, from a medium access control (MAC) layer; and

(c) generating and outputting the packet-based transmission control parameters on the basis of the received information.

2. The method as claimed in claim 1, wherein the class information of the AV application and the characteristic information of the AV packet represent characteristics of the AV packet and are contained in an identifier of the AV packet.

3. The method as claimed in claim 1, wherein the transmission control parameters include information selected from the group consisting of maximum allowable buffer storage time information of the AV packets, difference information between maximum allowable transmission times of the respective AV packets, priority level information, retransmission information of the AV packet, and importance information of the AV packet.

4. A selective retransmission method, comprising:

(a) transmitting packets of an MPEG-2 frame in real-time;

(b) checking for any transmission error after the transmission; and

(c) if any transmission error is generated, retransmitting only packets of an I-frame.

5. The method as claimed in claim 4, wherein in (c), during real-time transmission of the packets of the MPEG-2 frame, packets belonging to the I-frame are transmitted in an automatic retransmission

request (ARQ) interval, and packets not belonging to the I-frame are transmitted in a non-automatic retransmission request (non-ARQ) interval.

6. A selective retransmission method for transmitting data of an MPEG-2 frame, comprising:

(a) allowing a transmitting side medium access control (MAC) layer to transmit packets belonging to an I-frame to a receiving side MAC layer;

(b) after all packets belonging to the I-frame are transmitted, allowing the receiving side MAC layer to output to the transmitting side MAC layer a retransmission request for non-received packets due to any transmission error generated during transmission of the packets;

(c) allowing the transmitting side MAC layer, which received the retransmission request, to discard a number of packets of a B-frame following the I-frame, wherein the number of discarded packets of the B-frame equals a number of packets subject to the retransmission request; and

(d) retransmitting the packets subject to the retransmission request.

7. A selective retransmission method, by which a transmitting side medium access control (MAC) layer transmits packets of an MPEG-2 frame, comprising:

(a) determining whether a packet, to be currently transmitted by the transmitting side MAC layer, belongs to an I-frame;

(b) if the packet does not belong to the I-frame, transmitting the packet as is, and if the packet belongs to the I-frame, determining whether the packet is a start packet of the I-frame;

(c) if the packet is the start packet of the I-frame, transmitting to a receiving side MAC layer an automatic retransmission start message including the number of packets belonging to the I-frame; and

(d) preparing a buffer for use in an automatic retransmission request (ARQ) mode and transmitting the packets with their respective sequence numbers.

8. The selective retransmission method as claimed in claim 7, wherein (c) comprises:

(c1) if the packet is not the start packet of the I-frame, transmitting the packets with their respective sequence numbers;

(c2) determining whether the packet is an end packet of the I-frame;

(c3) if the packet is the end packet of the I-frame, performing retransmission of the packet; and

(c4) if the packet is not the end packet of the I-frame, starting the ARQ mode to transmit a next packet of an I-frame.

9. A selective retransmission method, by which a transmitting side medium access control (MAC) layer transmits packets of an MPEG-2 frame, comprising:

(a) starting an automatic retransmission request (ARQ) mode, and receiving a retransmission message of an MPEG-2 frame and sequence

numbers of packets requiring retransmission, from a receiving side MAC layer;

(b) receiving the retransmission message and the sequence numbers, determining whether any packets require retransmission, and if any packet requires retransmission, discarding a number of packets of a B-frame during a transmission standby state, wherein the number of discarded packets of the B-frame equals a total number of packets requiring retransmission; and

(c) determining whether the number of the packets of the B-frame is less than the total number of packets requiring retransmission, and if the number of packets of the B-frame is not less than the total number of packets requiring retransmission, then retransmitting the packets and awaiting a next retransmission message.

10. The method as claimed in claim 9, wherein in (b), if no packet requires retransmission, terminating an ARQ mode.

11. The method as claimed in claim 9, wherein in (c), if the number of packets of the B-frame is less than that of the packets requiring retransmission, terminating an ARQ mode.

12. A selective retransmission method, by which a receiving side medium access control (MAC) layer receives packets of an MPEG-2 frame, comprising:

(a) initializing a selective automatic retransmission request (ARQ) operation mode;

(b) receiving a selective automatic retransmission request (ARQ) start message, and allowing a receiving side MAC layer to prepare a retransmission buffer with a window size equal to a number of packets belonging to an I-frame, which is included in the selective ARQ start message and transmitted from a transmitting side MAC layer;

(c) setting the selective ARQ operation mode, estimating transmission time of all packets in the I-frame using information regarding the number of packets requiring retransmission, and setting a timer value;

(d) determining whether the set time has elapsed, and if the set time has elapsed, determining whether all packets of the I-frame have been received; and

(e) if all packets are not received, analyzing sequence numbers of the packets received during the set period of time, and transmitting a retransmission request message including sequence numbers of the packets not received, and resetting a buffer and a timer value for automatic retransmission request (ARQ) mode.

13. The method as claimed in claim 12, wherein in (e), if all packets are received and no packet requires retransmission, (e) comprises:

transmitting a retransmission message including no sequence numbers (NULL); and

terminating the ARQ operation mode.

14. A computer readable medium having embodied thereon a computer program for the method according to claim 1.

15. A selective retransmission apparatus, in which a receiving side medium access control (MAC) layer receives packets from a transmitting side MAC layer, comprising:

a frame detector for detecting a frame type of the packet;

a transmission error detector for detecting any non-received packets due to any transmission error generated during transmission of the packets; and

a retransmission function unit for transmitting to the transmitting side MAC layer a retransmission message and sequence number information of the non-received packets if any transmission error exists, according to a

detection result from the frame detector, and for receiving the packets through retransmission by the transmitting side MAC layer.

16. The apparatus as claimed in claim 15, wherein the frame detector determines whether the frame is an I-frame, a B-frame, or a P-frame of an MPEG-2 frame.

17. The apparatus as claimed in claim 15, wherein the retransmission function unit performs retransmission of packets only when where the frame detector detects an I-frame.